Amendments to the Specification

Please replace corresponding paragraphs in the application with new paragraphs appearing below, which have been marked up to show changes made:

[028] Referring now to the drawings, wherein like reference numerals indicate the same parts throughout the several views, a preferred embodiment of the inventive reflectance sensor **20** is shown in its general environment in FIGS. 1 and 1A. In one application, a plurality of sensors, of which sensors **20** are representative, are disposed along boom **22** at substantially equal spacings. Preferably, boom **22** extends laterally from vehicle **24**. Spray nozzles, of which nozzle **26** is representative, are also disposed along boom **22** preferably such that a nozzle **26**, or group of nozzles, corresponds to each sensor **20**. As the vehicle **24** travels along a crop row, boom [[**20**]] 22 projects over the plants such that each sensor **20** evaluates the plant or plants in its immediate view, determines the extent to which nitrogen fertilizer is needed, and controls the rate of application of fertilizer through its corresponding nozzle **26**.

[45] Once the microprocessor **50** has gathered reflectance information from receivers **38** and **48**, it is necessary to process the information to determine the need for nitrogen. One method for using reflectance information to determine such a need is disclosed in co-pending United States Patent Application, Serial No. ~~_____~~ 09/911,867, entitled "A Process for In-Season Fertilizer Nitrogen Application Based on Predicted Yield Potential," filed ~~contemporaneously herewith~~ July 24, 2001, which is incorporated herein by reference.